FIG. 1

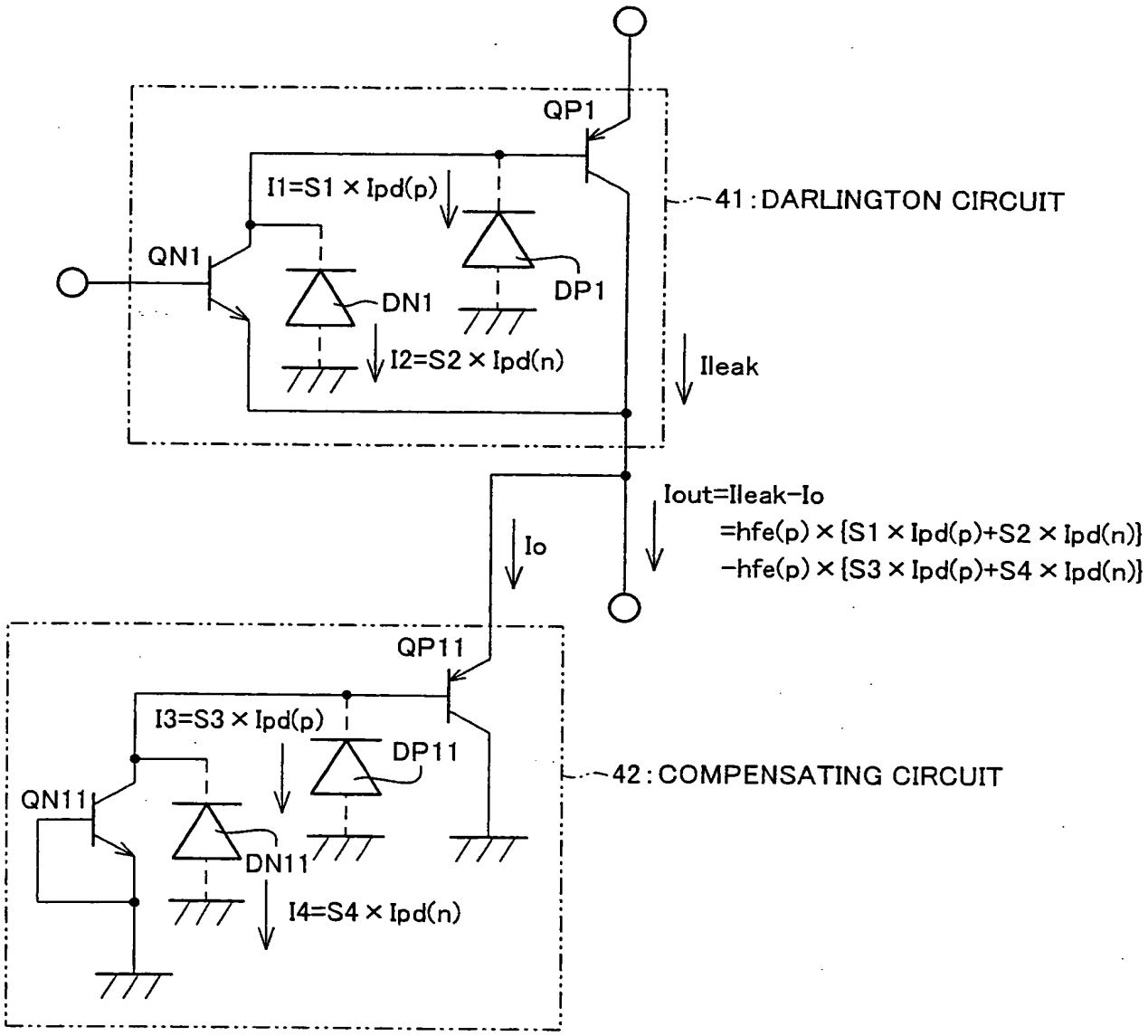
QP1
I1=S1 × Ipd(p)
41 : DARLINGTON CIRCUIT
QN1
DN1
DP1
I2=S2 × Ipd(n)
Ileak
Iout=Ileak−Io
=hfe(p) × {S1 × Ipd(p)+S2 × Ipd(n)}
−hfe(p) × {S3 × Ipd(p)+S4 × Ipd(n)}
Io
QP11
I3=S3 × Ipd(p)
DP11
42 : COMPENSATING CIRCUIT
QN11
DN11
I4=S4 × Ipd(n)

FIG. 2
RELATED ART

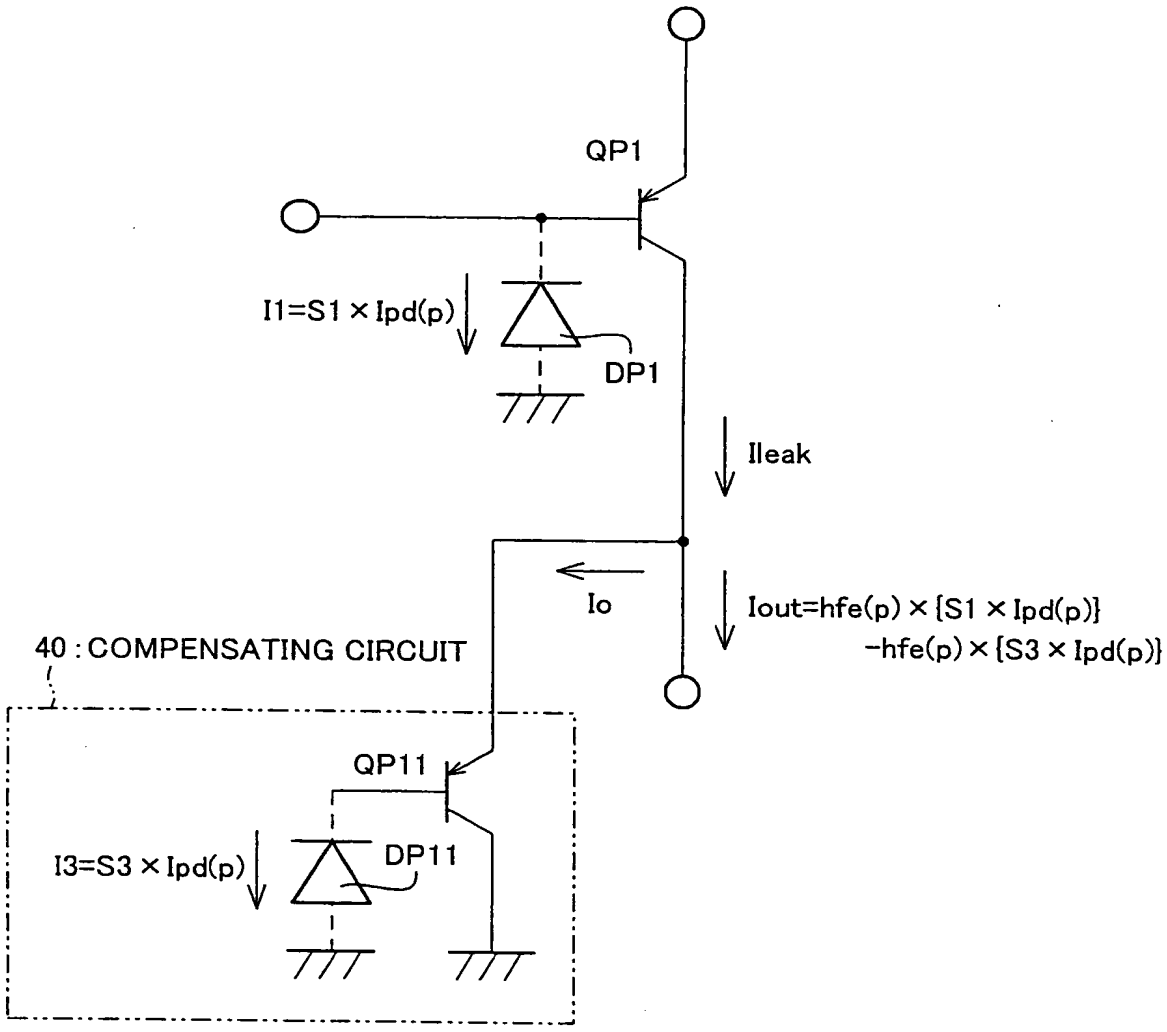

FIG. 3

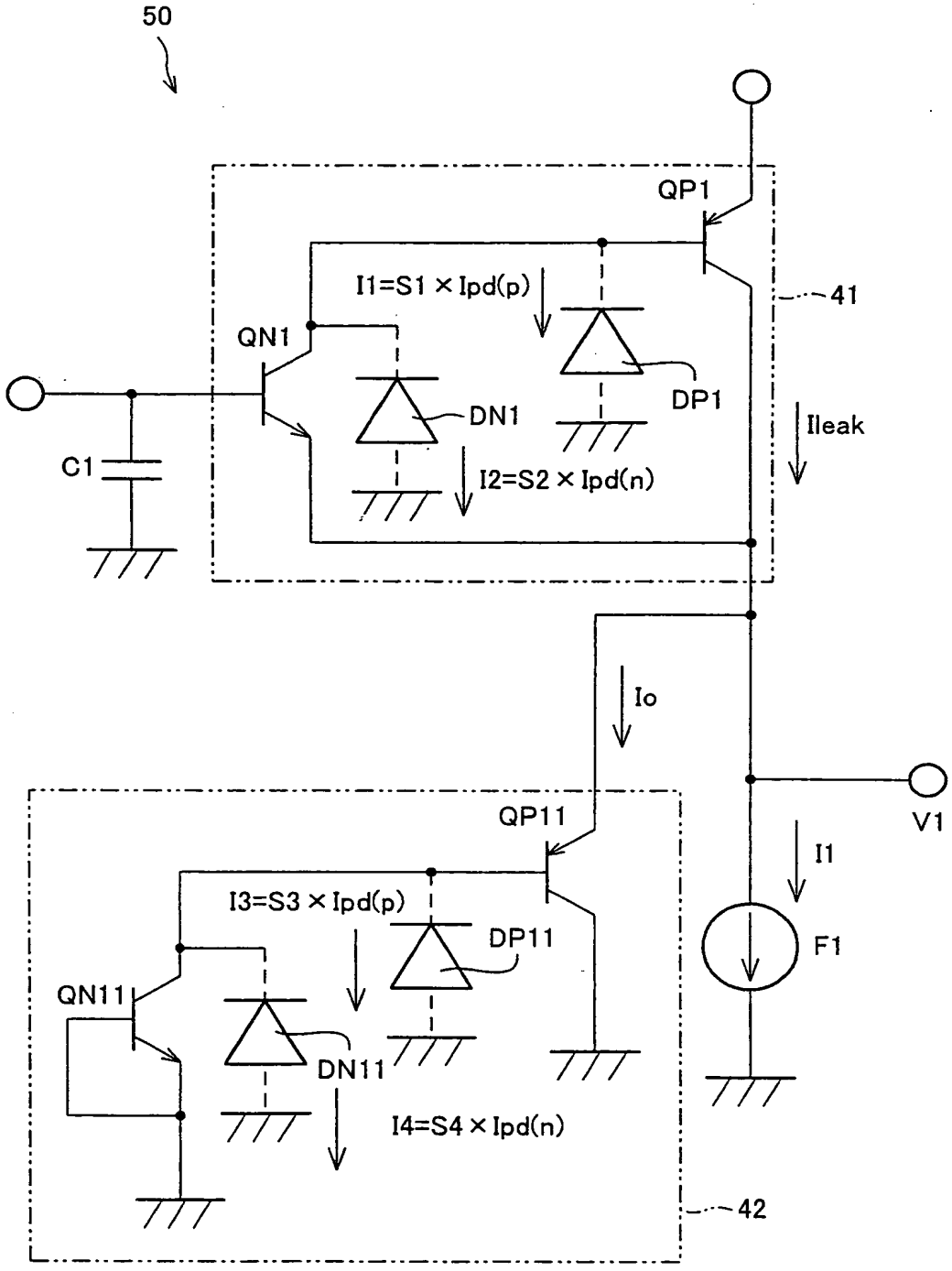
50
QP1
I1=S1 × Ipd(p)
41
QN1
DP1
DN1
Ileak
C1
I2=S2 × Ipd(n)
Io
V1
QP11
I1
I3=S3 × Ipd(p)
DP11
F1
QN11
DN11
I4=S4 × Ipd(n)
42

FIG. 4

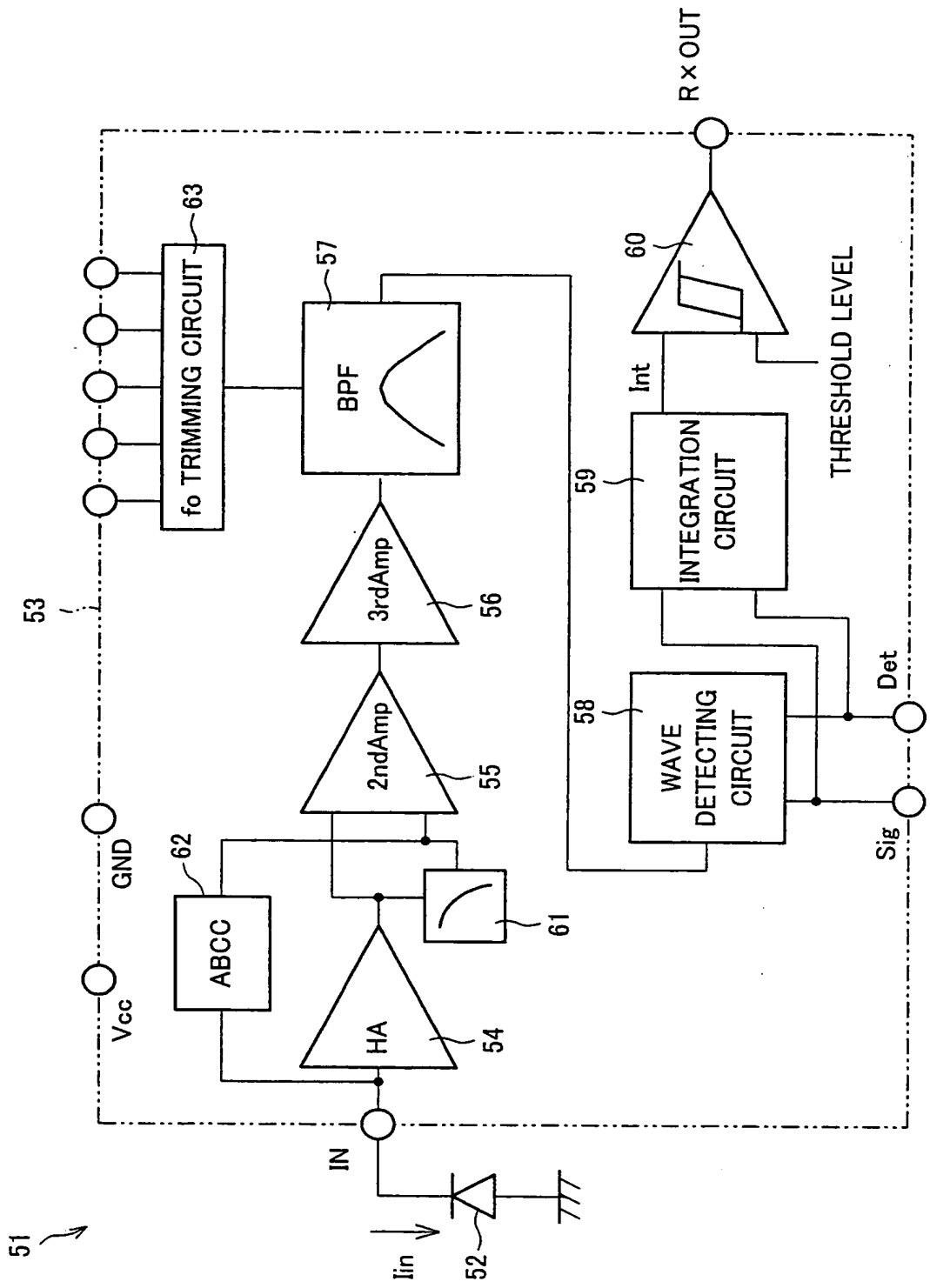
51
52
Iin
IN
53
Vcc
GND
R×OUT
Det
Sig
HA
54
2ndAmp
55
3rdAmp
56
BPF
57
WAVE DETECTING CIRCUIT
58
INTEGRATION CIRCUIT
59
Int
60
THRESHOLD LEVEL
61
ABCC
62
fo TRIMMING CIRCUIT
63

FIG. 5

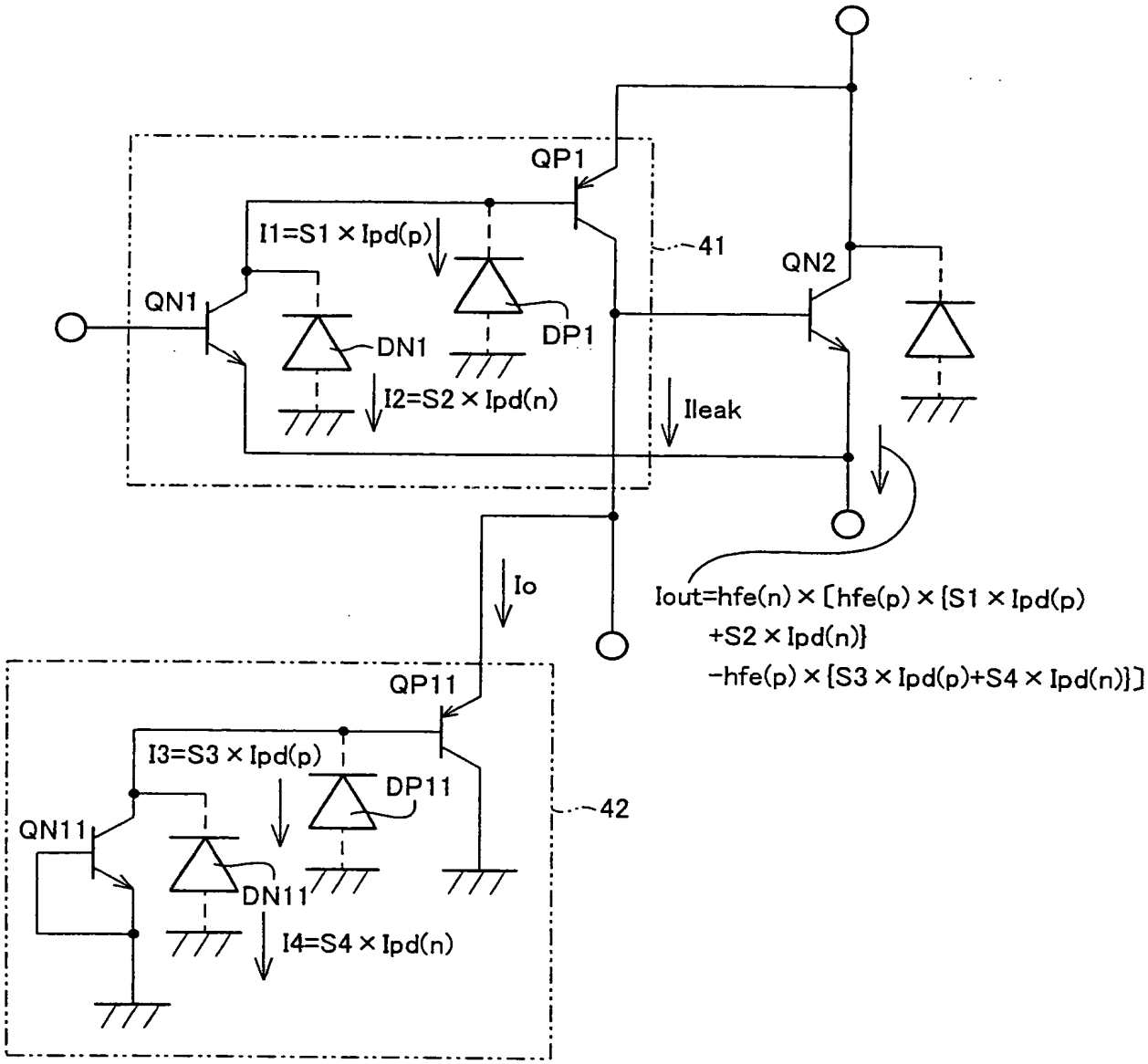
QP1
I1=S1 × Ipd(p)
41
QN2
QN1
DN1
DP1
I2=S2 × Ipd(n)
Ileak
Io
Iout=hfe(n) × [hfe(p) × {S1 × Ipd(p)
+S2 × Ipd(n)}
−hfe(p) × {S3 × Ipd(p)+S4 × Ipd(n)}]
QP11
I3=S3 × Ipd(p)
DP11
42
QN11
DN11
I4=S4 × Ipd(n)

FIG. 6
PRIOR ART

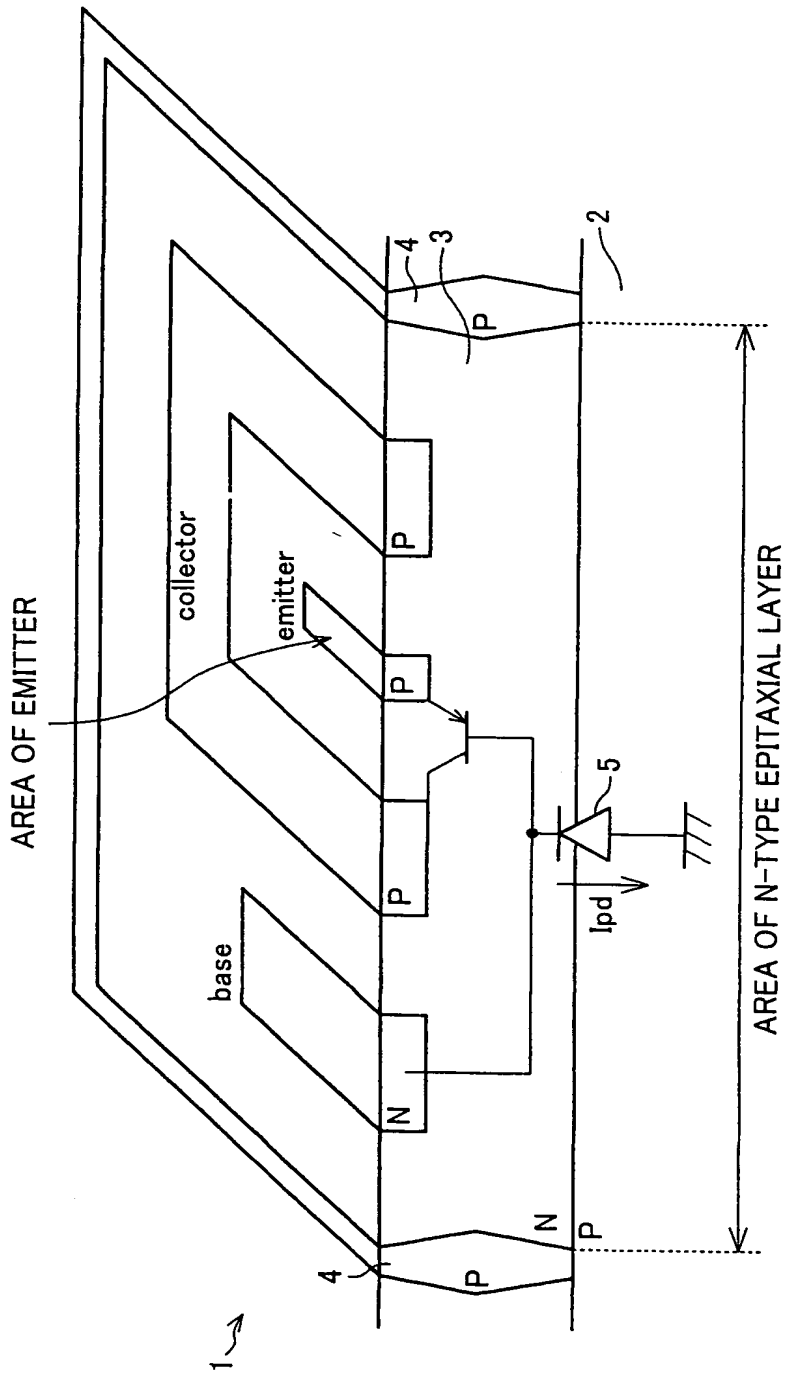

FIG. 7
PRIOR ART

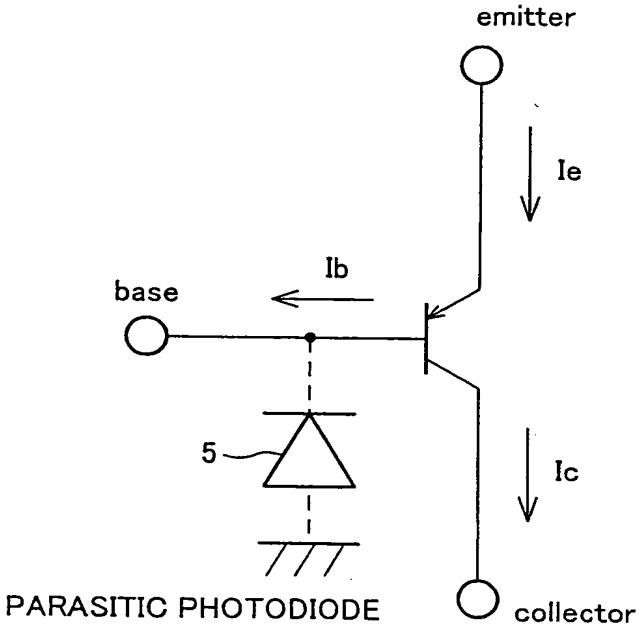

FIG. 8
PRIOR ART

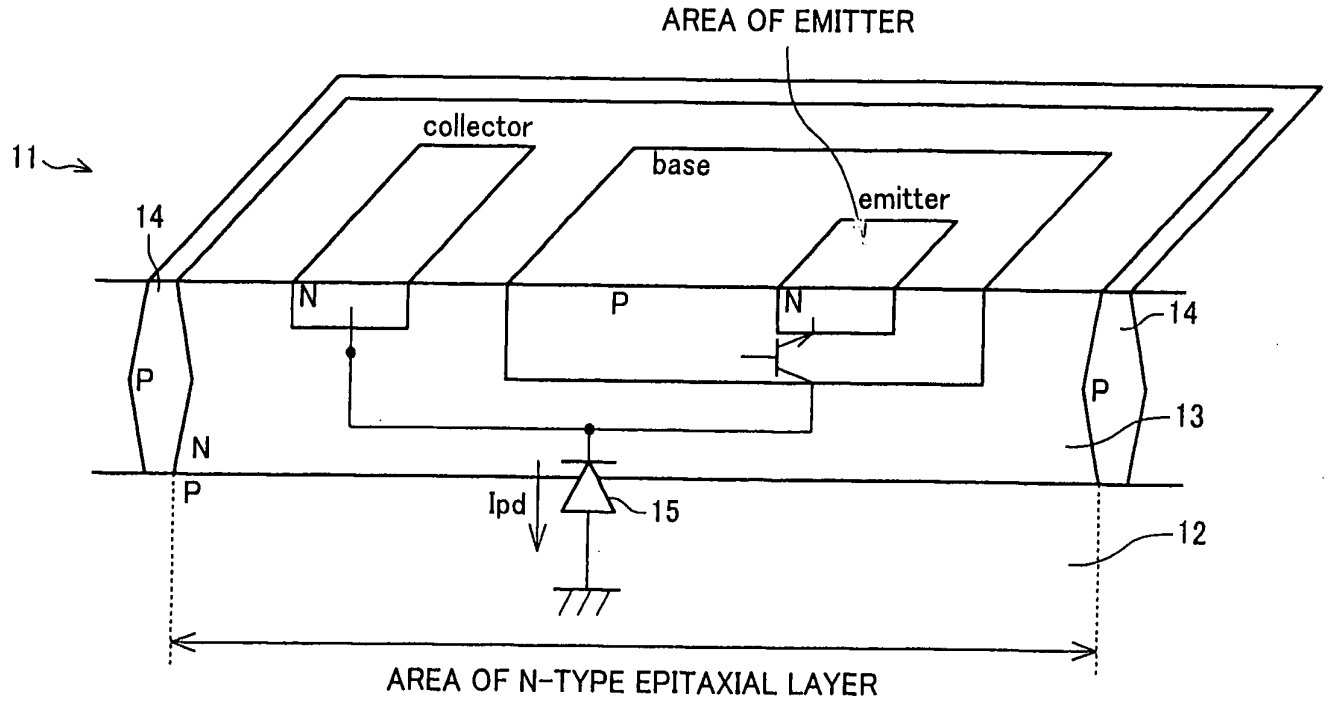

FIG. 9
PRIOR ART

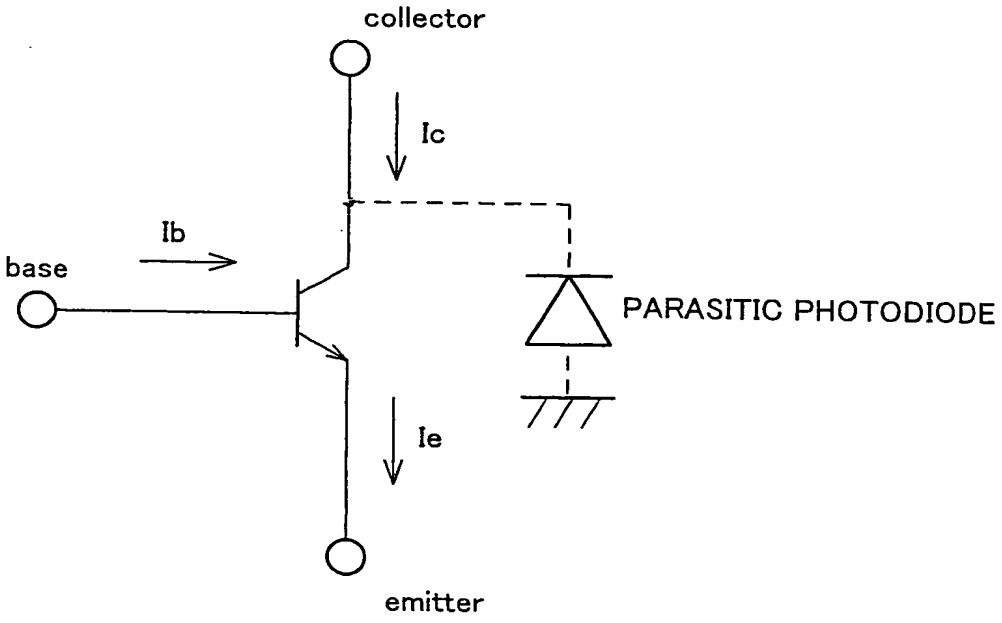

FIG. 10
PRIOR ART

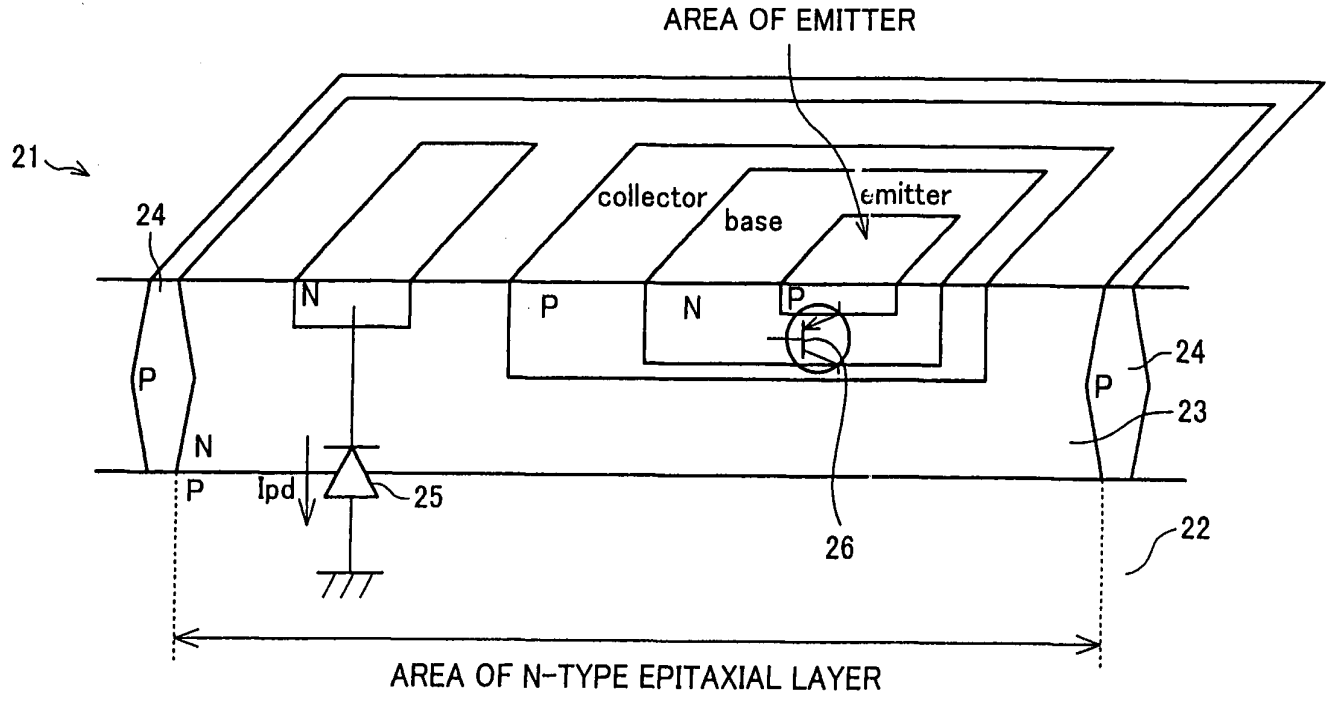

FIG. 11
PRIOR ART

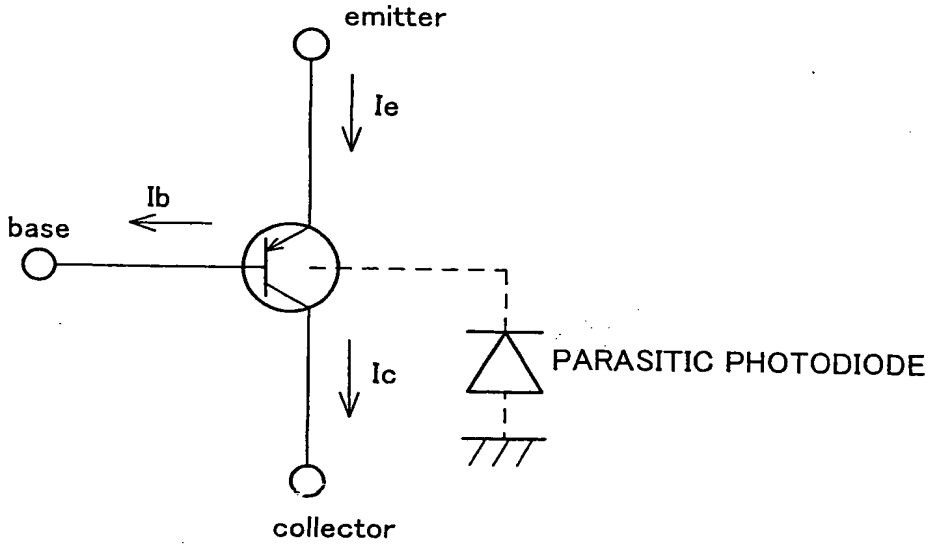

FIG. 12
PRIOR ART

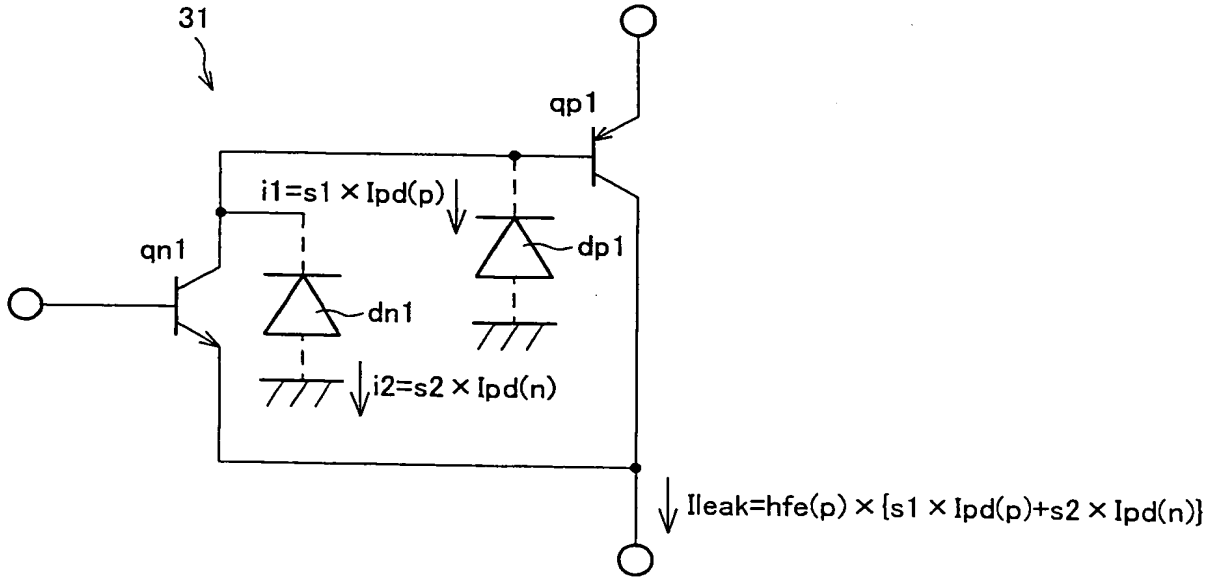
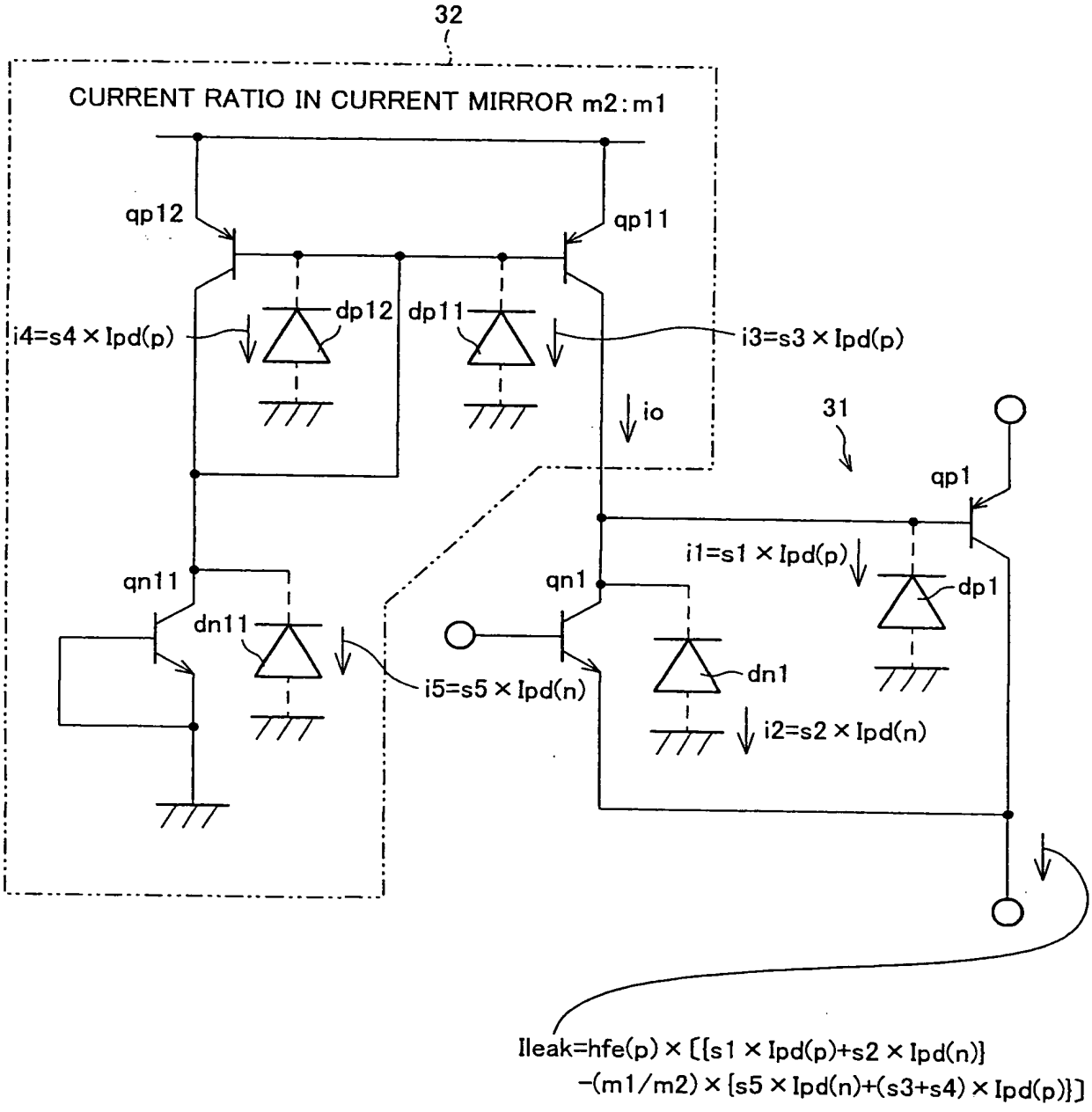
FIG. 13
PRIOR ART